I CLAIM AS MY INVENTION:

1. A method for suppressing an acoustic interference signal in an incoming audio signal from an acoustic source to a directional microphone system, having at least two microphones, comprising the steps of:

detecting said incoming audio signal with said at least two microphones and, in each of said at least two microphones, producing an output microphone signal therefrom;

generating at least two directional microphone signals by combining the respective output microphone signals with respective weightings, the respective weightings defining a direction-dependent sensitivity distribution of the directional microphone system;

normalizing each of said directional microphone signals with respect to the same sensitivity of the directional microphone system in one direction region, for producing normalized directional microphone signals each having an interference signal component; and

selecting one of said normalized directional microphone signals having a lowest interference signal component as an output directional microphone signal.

2. A method as claimed in claim 1 wherein the step of selecting one of said normalized directional microphone signals comprises selecting one of said normalized directional microphone signals having a lowest signal energy as said output signal.

3. A method as claimed in claim 1 comprising selecting the respective weightings for minimizing the sensitivity of the directional microphone system to an

interference signal source located in a predetermined direction relative to said directional microphone system.

4. A method as claimed in claim 1 comprising setting the respective weightings dependent on an effect of an acoustic environment in which said directional microphone system is used.

5. A method as claimed in claim 4 comprising setting the respective weightings dependent on the sensitivity of the directional microphone system when disposed on a head or a head simulation.

6. A method as claimed in claim 1 wherein said output microphone signals each have an amplitude and a phase, and comprising setting the respective weightings with at least one of an amplitude factor and a phase factor for respectively correcting at least one of the amplitude and phase of said output microphone signals.

7. A method as claimed in claim 1 comprising storing the respective weightings as characteristics selected from the group consisting of frequency-dependent characteristics and direction-dependent characteristics.

8. A method as claimed in claim 1 comprising storing said respective weightings in a memory and retrieving the respective weightings from said memory for generating said at least two directional microphone signals.

9. A method as claimed in claim 1 comprising generating said at least two directional microphone signals substantially simultaneously.

10. A method as claimed in claim 1 comprising changing the respective weightings between generation of two of said at least two directional microphone signals to successively generate respective directional microphone signals with different direction-dependent sensitivities.

11. A method as claimed in claim 1 wherein said output microphone signals have a frequency range, and comprising subdividing said frequency range into a plurality of frequency bands and, in each of said frequency bands, generating and normalizing said at least two directional microphone signals, and from among all of said frequency bands selecting said one of said normalized directional microphone signals having the lowest interference signal component as said output directional microphone signal.

12. A method as claimed in claim 1 wherein said output microphone signals have a frequency range and comprising subdividing said frequency range into a plurality of frequency bands and, in each frequency band, generating and normalizing said at least two directional microphone signals, and wherein the step of selecting one of said normalized directional microphone signals with the lowest interference signal component as said output directional microphone signal comprises identifying, in each of said frequency bands, one directional microphone signal having the lowest interference signal component, and forming said output directional microphone signal from the respective normalized directional microphone signals with the lowest interference signal component in the respective frequency bands.

13. An apparatus for suppressing an acoustic interference signal in an incoming audio signal comprising:

a directional microphone system having at least two microphones for detecting said incoming audio signal, each of said at least two microphones generating a microphone signal therefrom;

weighting units for respectively weighting said microphone signals with respective weightings for producing at least two directional microphone

signals, the respective weightings defining a direction-dependent sensitivity of the directional microphone system;

a normalization unit connected to said weighting units for normalizing the respective directional microphone signals with respect to the same sensitivity of the directional microphone system in one direction region, for producing a plurality of normalized directional microphone signals each having an interference signal component; and

a selection unit connected to said normalization unit for selecting one of said normalized directional microphone signals having a lowest interference signal component as an output directional microphone signal.

14. An apparatus as claimed in claim 13 comprising, for each of said microphones, a filter bank connected thereto for subdividing the microphone signal from the microphone connected thereto into a plurality of frequency bands, each frequency band having an output at which a signal component of the microphone signal in that frequency band is present, with respective outputs of the respective filter banks in the same frequency band being connected in pairs to the respective weighting units, and each weighting unit comprising at least one of an amplitude for varying an amplitude of the signal component and a phase unit for shifting the phase of the signal component, for generating, in each of said frequency bands, said at least two directional microphone signals, and wherein said normalization unit normalizes said at least two directional microphone signals in each of said frequency bands for producing said plurality of normalized directional microphone signals, and wherein said selection unit comprises a comparator for comparing all of said normalized directional microphone signals in all of said frequency bands with each other for selecting said one of said normalized directional microphone signals having

the lowest interference signal component as said output directional microphone signal.

15. An apparatus as claimed in claim 13 comprising, for each of said microphones, a filter bank connected thereto for subdividing the microphone signal from the microphone connected thereto into a plurality of frequency bands, each frequency band having an output at which a signal component of the microphone signal in that frequency band is present, with respective outputs of the respective filter banks in the same frequency band being connected in pairs to the respective weighting units, and each weighting unit comprising at least one of an amplitude for varying an amplitude of the signal component and a phase unit for shifting the phase of the signal component, for generating, in each of said frequency bands, said at least two directional microphone signals, and wherein said normalization unit normalizes said at least two directional microphone signals in each of said frequency bands for producing said plurality of normalized directional microphone signals, and wherein said selection unit comprises a plurality of comparators respectively for said frequency bands, said comparators, in respective frequency bands, comparing said at least two normalized directional microphone signals in that frequency band with each other to identify, in that frequency band, the normalized directional microphone signal having the lowest interference signal component, and a combination unit connected to said plurality of comparators for forming said output directional microphone signal from the respective normalized directional microphone signals having the lowest interference signal component in the respective frequency bands.